



FASCAT (R) 4231 Catalyst

Material Safety Data Sheet

Arkema Inc.

1 PRODUCT AND COMPANY IDENTIFICATION

Functional Additives

2000 Market Street
21st Floor
Philadelphia, PA 19103-3222

EMERGENCY PHONE NUMBERS:

Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887
Medical: Rocky Mountain Poison Control Center
(866) 767-5089 (24Hrs)

Information Telephone Numbers	Phone Number	Available Hrs
Customer Service Number	(800) 331-7654	8:00 AM - 5:00 PM EST

Product Name FASCAT (R) 4231 Catalyst
Product Synonym(s)

Chemical Family Organotin
Chemical Formula C₂₈H₅₆S₂Sn
Chemical Name See below
EPA Reg Num NA
Product Use Catalyst

2 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient Name	CAS RegistryNumber	Typical %	OSHA
Dibutyltin bis (2-ethylhexyl mercaptoacetate)	10584-98-2	> 98	Y

The substance(s) marked with a "Y" in the OSHA column, are identified as hazardous chemicals according to the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200)

The components of this product are all on the TSCA Inventory list.

3 HAZARDS IDENTIFICATION

Emergency Overview

Oily yellow liquid with a characteristic odor.

WARNING!

MAY BE HARMFUL IF SWALLOWED.

CAUSES EYE, SKIN AND RESPIRATORY TRACT IRRITATION.

POSSIBLE REPRODUCTIVE AND BIRTH DEFECT HAZARD. MAY CAUSE ADVERSE REPRODUCTIVE EFFECTS AND BIRTH DEFECTS BASED ON ANIMAL DATA

MAY CAUSE ALLERGIC SKIN REACTION.

Potential Health Effects

Inhalation and skin contact are expected to be the primary routes of occupational exposure to this material. Based on single exposure animal tests, it is considered to be slightly toxic if swallowed, no more than slightly toxic if absorbed through skin, slightly irritating to eyes and severely irritating to skin. Repeated exposure may cause an allergic skin reaction. If swallowed, this material will react in the body to form a material which, based on studies in animals, may cause reproductive effects and birth defects.

4 FIRST AID MEASURES

4 FIRST AID MEASURES

IF IN EYES, immediately flush with plenty of water for at least 15 minutes. Get medical attention.

IN CASE OF CONTACT, immediately flush with plenty of water. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

IF SWALLOWED, induce vomiting immediately as directed by medical personnel. Get medical attention. Call a Poison Control Center. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

IF INHALED, remove to fresh air. If breathing is difficult, get medical attention.

5 FIRE FIGHTING MEASURES**Fire and Explosive Properties**

Auto-Ignition Temperature	NE		
Flash Point	200 deg C	Flash Point Method	COC
Flammable Limits- Upper	NE		
Lower	NE		

Extinguishing Media

Use water spray, carbon dioxide, foam or dry chemical.

Fire Fighting Instructions

Contain run-off from fire. Fire fighters and others who may be exposed to products of combustion should wear full fire fighting turn out gear (full Bunker Gear) and self-contained breathing apparatus (pressure demand NIOSH approved or equivalent). Fire fighting equipment should be thoroughly decontaminated after use.

Fire and Explosion Hazards

When burned, the following hazardous products of combustion can occur: Carbon monoxide Carbon dioxide Tin oxides Avoid breathing fumes from fire exposed material.

6 ACCIDENTAL RELEASE MEASURES**In Case of Spill or Leak**

Stop the leak, if possible. Ventilate the space involved. Contain, sweep up, place in container for disposal. Prevent waterway contamination. Construct a dike to prevent spreading. Collect run-off water and transfer to drums or tanks for later disposal. Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.

Clean up procedures: Transfer to containers, in preparation for later disposal. Avoid generation of dusts. Remove from spill location. Flush area with water spray, collect rinsate.

7 HANDLING AND STORAGE**Handling**

Do not taste or swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapor. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

Storage

This material is not hazardous under normal storage conditions; however, material should be stored in closed containers, in a secure area to prevent container damage and subsequent spillage. Upon exposure to

7 HANDLING AND STORAGE

direct sunlight, product degradation to an organic tin salt may occur.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION
Engineering Controls

Investigate engineering techniques to reduce exposures below airborne exposure limits. Provide ventilation if necessary to control exposure levels below airborne exposure limits (see below). If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment.

Eye / Face Protection

Where there is potential for eye contact, wear chemical goggles and have eye flushing equipment immediately available.

Skin Protection

Wear appropriate chemical resistant protective clothing and chemical resistant gloves to prevent skin contact. Consult glove manufacturer to determine appropriate type glove material for given application. Wear chemical goggles, a face shield, and chemical resistant clothing such as a rubber apron when splashing may occur. Rinse immediately if skin is contaminated. Remove contaminated clothing promptly and wash before reuse. Clean protective equipment before reuse. Provide a safety shower at any location where skin contact can occur. Wash skin thoroughly after handling.

Respiratory Protection

Avoid breathing vapor or mist. When airborne exposure limits are exceeded (see below), use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Full facepiece equipment is recommended and, if used, replaces need for face shield and chemical goggles. Consult OSHA Standard (29 CFR § 1910.10 to determine required type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where exposure limit may be significantly exceeded, use an approved full face positive-pressure, self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply. Respiratory protection programs must comply with 29 CFR § 1910.134.

Airborne Exposure Guidelines for Ingredients

Exposure Limit		Value
Dibutyltin bis (2-ethylhexyl mercaptoacetate)		
ACGIH Skin designator	-	Y
ACGIH STEL	-Organic tin compounds, as Sn	0.2 mg/m ³
ACGIH TWA	-Organic tin compounds, as Sn	0.1 mg/m ³
ARKEMA 12-hour TWA	-Mono- and dibutyl tin compounds, as Sn	0.07 mg/m ³
OSHA TWA PEL	-Organic tin compounds, as Sn	0.1 mg/m ³

-Only those components with exposure limits are printed in this section.

-Skin contact limits designated with a "Y" above have skin contact effect. Air sampling alone is insufficient to accurately quantitate exposure. Measures to prevent significant cutaneous absorption may be required.

-ACGIH Sensitizer designator with a value of "Y" above means that exposure to this material may cause allergic reactions.

-WEEL-AIHA Sensitizer designator with a value of "Y" above means that exposure to this material may cause allergic skin reactions.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor	Oily yellow liquid with a characteristic odor.
pH	5.0-6.0
Specific Gravity	1.11
Vapor Pressure	30-50 u at 149 deg C
Vapor Density	NE
Melting Point	-23 deg C
Freezing Point	-23 deg C
Boiling Point	NE
Solubility In Water	Insoluble
Evaporation Rate	NE
Percent Volatile	NE

10 STABILITY AND REACTIVITY**Stability**

This material is chemically stable under normal and anticipated storage and handling conditions.

Hazardous Polymerization

Does not occur.

Incompatibility

Contact with bases and reducing agents may result in a low energy release

Hazardous Decomposition Products

None known

11 TOXICOLOGICAL INFORMATION**Toxicological Information**

Data on this material and/or its components are summarized below.

Single exposure (acute) studies indicate:

Oral - Slightly Toxic to Rats (LD50 510-4,439 mg/kg)

Dermal - No More than Slightly Toxic to Rats (LD50 >2,000 mg/kg)

Eye Irritation - Slightly Irritating to Rabbits

Skin Irritation - Severely Irritating to Rabbits

12 ECOLOGICAL INFORMATION**Ecotoxicological Information**

Data on this material and/or its components are summarized below.

Dibutyltin bis (2-ethylhexyl mercaptoacetate)

This material is highly toxic to *Daphnia magna* (48-hr EC50 0.035 mg/l) and algae (72-hr EC50 0.56 mg/l). It is moderately to slightly toxic to zebra fish (96-hr LC50 11.7-43 mg/l) and practically non-toxic to bacteria (3-hr LC50 >100 mg/l). *Daphnia* 21 day EC50 640 ug/l.

**12 ECOLOGICAL INFORMATION****Chemical Fate Information**

Data on this material and/or its components are summarized below.

Dibutyltin bis (2-ethylhexyl mercaptoacetate)

This material is inherently biodegradable (30 -40% after 26 days and 50 - 60% after 74 days).

13 DISPOSAL CONSIDERATIONS**Waste Disposal**

Recover, reclaim or recycle when practical. Dispose of in an approved landfill if allowed locally. Comply with federal, state, and local regulations. Dispose of in a permitted waste management facility if incineration or landfill is not practical.

14 TRANSPORT INFORMATION

DOT Name Not regulated by DOT
DOT Technical Name
DOT Hazard Class
UN Number
DOT Packing Group PG
RQ

15 REGULATORY INFORMATION**Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370)**

Immediate (Acute) Health	Y	Fire	N
Delayed (Chronic) Health	N	Reactive	N
		Sudden Release of Pressure	N

The components of this product are all on the TSCA Inventory list.

Ingredient Related Regulatory Information:**SARA Reportable Quantities**

	CERCLA RQ	SARA TPQ
Dibutyltin bis (2-ethylhexyl mercaptoacetate)	NE	NE

New Jersey Right to Know

This product does contain the following chemical(s), as indicated below, currently on the New Jersey Right-to-Know Substances List.

Dibutyltin bis (2-ethylhexyl mercaptoacetate)

16 OTHER INFORMATION



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Arkema Inc.

Revision Information

Revision Date 08 JAN 2007

Revision Number 7

Supersedes Revision Dated 02-JAN-2007

Revision Summary

Update PHE, Tox and Eco data from HEIS

Key

NE= Not Established NA= Not Applicable (R) = Registered Trademark

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